Background

A sub-group of the M&EE Networking Group have looked at the arrangements for Operator Competency standards for On Track Plant (OTP). The M&EE Networking Group recommend this COP as good practice for the industry.

M&EE COPs are produced for the benefit of any industry partner who wishes to follow the good practice on any railway infrastructure. Where an infrastructure manager has mandated their own comparable requirements, the more onerous requirements should be followed as a minimum for work on their managed infrastructure.

The M&EE Networking Group makes no warranties, express or implied, that compliance with this document is sufficient on its own to ensure safe systems of work or operation. Users are reminded of their own duties under health and safety legislation.

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Sign off
The M&EE Networking Group agreed and signed off this Code of Practice on 17 July 2019 and published on 7 September 2019

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Purpose
This Code of Practice provides guidance on the competency requirements for operators of On Track Plant (OTP) on railway infrastructures other than where the Infrastructure Manager has a more onerous mandated competency management scheme. This guidance is in addition to competencies required to operate the machine in a non-rail environment, this would include lifting operations.

Scope
This Code of Practice covers the operation of all OTP on rail infrastructures other than where the Infrastructure Manager has a more onerous mandated competency management scheme.
Definitions

Engineering Approval
The approval process of the Infrastructure Manager that permits the operational use of the vehicle and its known attachments.

On Track Plant (OTP)
Machines with rail wheels capable of running on railway track, limited by their engineering acceptance to running within a possession only. These comprise: demountable machines, road rail vehicles (RRVs) and trailers.

Demountable Machine
A machine that can travel on rail under its own power system. Such machines are not allowed to operate, work or travel outside possessions. Rail in this definition refers to permanent rails intended for use by normal rail vehicles.

Road-Rail Vehicle (RRV)
A vehicle that can travel on the road under its own power and also travel on rail by virtue of a rail wheel guidance system under its own power system. Such vehicles are not allowed to operate, work or travel on rail outside possessions.

Trailer
A non-self-propelled, rail mounted vehicle capable of being towed or propelled (this includes attachments with more than two rail wheels).

1. Competency
1.1. Generic competency
1.1.1. The minimum competency requirements and pre-requisites for operators of OTP should include:

a) Infrastructure Manager’s track safety awareness and access requirements including safety critical communication systems.

b) Understanding and use of the required documentation for the duties to be undertaken including:

   i Log book.
   ii Duty charts.
   iii Statutory examination reports.
   iv Lifting accessory documentation.
Engineering approval including any applicable limitations of use.

Operating manuals and/or instructions.

c) Correct pre-use checks of the machine including: operator maintenance requirements and on track functional brake tests.

d) Understanding of the procedure for reporting defects.

e) The correct procedure for on and off-tracking.

f) Correct configuration for the duties to be undertaken, including use on cants and gradients.

g) Correct operation of the specific machine in all modes including working and travelling required for the duties to be undertaken.

Note: if there is a requirement to use trailers, attachments or any other ancillary equipment, the requirements within this COP should also apply.

h) Professional driving techniques including:

i) driving conditions, such as poor rail head conditions, visibility, inclement weather, braking techniques, varied lighting conditions. This list is not exhaustive.

ii) machines operations such as reversing, slewing, towing-propelling.

iii) Hazard perception including limited clearances, personnel (exclusion zones), observation of the infrastructure managers permissible operating/travelling speeds.

i) Understanding of infrastructure hazards, and restrictions when working in areas with:

i) overhead electrical traction supply equipment,

ii) dc 3rd/4th rail electrified lines

iii) overhead electricity supply lines

iv) points & crossings

v) unsuitable track conditions e.g. voiding, un-clipped/unsecured rail, un-supported track, track twist, dipped rail etc.

vi) buried services

vii) tunnels and enclosed locations

j) Understanding of emergency procedures including:

i) fire,

ii) derailment,

iii) recovery of OTP (COP0019 Action to be Taken in the Event of Accident or Incident involving OTP).
iv) recovery of personnel from height e.g. MEWPs
v) runaway and emergency protection of the line.

k) Use of communication methods e.g. radio, hand signals etc.

l) Awareness of applicable Legislation, Industry Standards and Codes of Practice.

1.2. OTP used for lifting operations

1.2.1. In addition to the generic competency requirements described in 1.1 the minimum additional competencies for operators of OTP used for lifting operations should include an understanding of the correct lifting procedures and use of the Rated Capacity Indicator (RCI) covering:

i) Assessing weight and radius.
ii) Use of lifting accessories.
iii) Reading duty charts and setting RCI correctly.
iv) Lifting on-rail and off-rail (including lift and carry).
v) Lifting and lowering on a cant or gradient (high and low side working)
vi) Correct action in the event of RCI failure.

vii) Movement limiting devices and working restrictions.
viii) Multiple lifting i.e. lifting of a load with more than one machine (may require additional risk assessment and written methods of work).
ix) Handling serviceable and scrap rail including thimbling.

2. Certification

2.1. Operators competency certificates need to include

a) Details of the machine, its intended use and any attachments.
b) Operator identification details.
c) Validity period of certificate.
d) Issuing authority details.

3. Maintaining Competence

Organisations who employ OTP operators should ensure that suitable arrangements are in place to manage and maintain their ongoing competence including:
• Monitoring systems to check staff compliance
• Ongoing machine experience including frequency of use to eliminate skill fade
• Continuous development
• Systems to ensure shared learning and best practice briefings
• Knowledge re-assessment
• Behavioural competence